

WHAT IS CLAIMED IS:

1. A surface-mount type antenna comprising:

a base body made of a rectangular parallelepiped dielectric or magnetic material;

a feeding terminal formed at one end of one side surface of the base body; and

a radiating electrode, to one end of which is connected the feeding terminal, disposed such that its other end is routed from one end side part of one side surface, through one end side part of one principal surface of the base body, to another end side part of one principal surface, or another end side part of one side surface, or another end side part of another principal surface, and extends farther from the other end side part to one end side part so as to be parallel to a ridge of the base body, and is eventually formed into an open end.

2. The surface-mount type antenna of claim 1, wherein a through hole or a groove is formed in the base body made of a rectangular parallelepiped dielectric or magnetic material, the through hole being drilled all the way through from one side surface to another side surface, or from one end face to another end face, or from one principal surface to the other principal surface of the base body, and the groove being formed on the other principal surface of the base body so as to penetrate all the way through from one end face to the other end face , or

from one side surface to the other side surface.

3. The surface-mount type antenna of claim 1, wherein an auxiliary terminal for surface mounting is formed on the other principal surface of the base body.

4. The surface-mount type antenna of claim 2, wherein an auxiliary terminal for surface mounting is formed on the other principal surface of the base body.

5. The surface-mount type antenna of claim 1, wherein the rectangular parallelepiped base body is chamfered at its corner and ridge to produce a curved or flat chamfer.

6. The surface-mount type antenna of claim 1, wherein the base body is made of a dielectric material having a relative dielectric constant ϵ_r which is kept within a range from 3 to 30.

7. The surface-mount type antenna of claim 1, wherein the base body is made of a magnetic material having a relative magnetic permeability μ_r which is kept within a range from 1 to 8.

8. An antenna apparatus comprising:

a mounting substrate having formed thereon a feeding electrode and a ground conductor layer with a linear side edge located in a vicinity of the feeding electrode; and

the surface-mount type antenna of claim 1,

wherein the antenna apparatus is constructed by mounting the surface-mount type antenna on the mounting substrate, with the other principal surface of the base body arranged on a top surface of the mounting substrate, with the ridge of the base body arranged parallel to the linear side edge of the ground conductor layer, and with the feeding terminal connected to the feeding electrode.

9. An antenna apparatus comprising:

a mounting substrate having formed thereon a feeding electrode and a ground conductor layer with a linear side edge located in a vicinity of the feeding electrode; and

the surface-mount type antenna of claim 2,

wherein the antenna apparatus is constructed by mounting the surface-mount type antenna on the mounting substrate, with the other principal surface of the base body arranged on a top surface of the mounting substrate, with the ridge of the base body arranged parallel to the linear side edge of the ground conductor layer, and with the feeding terminal connected to the feeding electrode.

10. An antenna apparatus comprising:

a mounting substrate having formed thereon a feeding electrode and a ground conductor layer with a linear side edge located in a vicinity of the feeding electrode; and

the surface-mount type antenna of claim 3,

wherein the antenna apparatus is constructed by mounting the surface-mount type antenna on the mounting substrate, with the other principal surface of the base body arranged on a top surface of the mounting substrate, with the ridge of the base body arranged parallel to the linear side edge of the ground conductor layer, and with the feeding terminal connected to the feeding electrode.

11. An antenna apparatus comprising:

a mounting substrate having formed thereon a feeding electrode and a ground conductor layer with a linear side edge located in a vicinity of the feeding electrode; and

the surface-mount type antenna of claim 4,

wherein the antenna apparatus is constructed by mounting the surface-mount type antenna on the mounting substrate, with the other principal surface of the base body arranged on a top surface of the mounting substrate, with the ridge of the base body arranged parallel to the linear side edge of the ground conductor layer, and with the feeding terminal connected to the feeding electrode.